

Navigating the Self in Near Future Science Fiction Films

Film Studies Undergraduate Research Thesis

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Introduction

The genre of science fiction has been around almost since the advent of film itself, beginning with George Méliè's *Trip to the Moon* (1902). For many decades, science fiction books and films have looked outward to explore the cultural anxieties that threatened a society, whether they be alien invasions, rapid advancements in technology, or tension between nations and ideologies. Science fiction is defined as a genre that emphasizes actual, speculative, or extrapolative science, which in turn, interacts in a social context; the genre attempts to reconcile the unknown and examine the given reality (Sobchak). This paper will build upon the definition of science fiction, focusing on the importance of emerging science in a social context to understand how individuals are defining themselves against or through the science of their reality.

As a whole, science fiction films have largely focused on the effects of society as a whole, however there has been a shift towards the end of the 20th century and the beginning of the 21st, toward a focus on what it means to be an individual in a futuristic world. The films under study are *The Truman Show* (1998), *Never Let Me Go* (2004), *Black Mirror* (2011-2016), *Under the Skin* (2013), *Her* (2013), and *Ex Machina* (2015). These films take the more personal side of technology--artificial intelligence--to the personal sides of media--reality television and social media--and explore projected near futures from a humanistic perspective. Here, the character is most important in understanding the reality. Instead of using lengthy exposition to create a detailed futuristic society, these films begin in the intimate world of their characters and slowly reveal aspects of the world around them, leaving the audience to figure out where, when, and how this future takes place and how the individual fits into it. Since many of these films are set in an unspecified "near-future," they blur the line between the viewer's reality and the

“future,” suggesting that, perhaps, the two aren’t so far apart. The characters in these films grapple with multiple ways of defining themselves as they live in an increasingly mediated world, from defining humanity to using media in an attempt to discover their true selves. This paper focuses on exploring the narrative characteristics of these films, to demonstrate that the near-future setting is established visually instead of through more overt narration. Then it shows how the films attempt to answer questions such as, “what does it mean to be an individual in this futuristic society?,” “how do we define the human?,” “what barriers or challenges are presented in individual self definition?,” and “in what ways has interpersonal interaction become changed or mediated in the near future?” through their character’s journey of self-definition.

Establishing a Near Future

In science fiction films, filmmakers have the difficult role of creating a reality that the viewer can perceive as possibly real. As part of the viewing experience, moviegoers suspend their disbelief and accept the world presented on screen as it is; and in other genres, at least some elements of that world are familiar. But in science fiction, the task is to not only make the world believable, but also comprehensible and credible (Sobchak). Often, to achieve viewer comprehension, science fiction films utilize more explanation and exposition, to set up the world and explicitly state how it came to be. Yet, these near future science fiction films do the opposite; they don’t explain their reality or place it at a specific point in time, blurring the line between present and future.

Although the concept of a “near future” is as temporally vague as it sounds, it is important in these films’ goals in relating their message to the viewer. A near future could be

five years away, or it could be thirty years away, but the defining feature is that the timeline isn't specified or easily deduced by the narrative of the film, which creates a sense of immediacy which speaks to the viewer more clearly about their problems in the present. All of these films--*Ex Machina*, *Her*, *The Truman Show*, *Under the Skin*, *Nosedive*, *Be Right Back*, and *The Entire History of You*--use narrative devices and mise-en-scene to slowly reveal their characters' realities, realities that blur their timeframes between past, present, and future.

As a general rule, the near future is revealed visually, instead of through narrative elements of exposition, like dates or references to prior events in history. The mise-en-scene plays an integral role in demonstrating the blur of past and present that is characteristic of a near future, with one of the most important elements being the appearance of technology. While the presence of unfamiliar technology marks the reality as being futuristic, its function in that future is to be streamlined and less noticeable. This philosophy is summed up nicely in a review of *Her* which states, "for a movie whose premise centers on technology, this film rarely presents it" (Fleischmann 67). This paradox is essential to these films' goal of exploring self definition because the appearance of technology works only to reveal aspects of the user's self that are complicated by that technology, instead of lauding or displaying technological advancement. One common example of this 'invisible technology' in *Black Mirror* episodes is contact lenses which either record or modify vision. In *Nosedive*, these lenses are connected to social media platforms, which augment the user's sight to include ratings and images from social media accounts. Additionally, they serve as a filter through which the user's vision is constantly being perfected; unclear images are enhanced, and even dust is edited out. In *Be Right Back*, the lenses serve as recording devices that can then be played back to any phone or television screen. The

lenses, which link to a chip in the user's head, also monitor the user's body, reporting things such as blood alcohol levels. Contact lenses are already incredibly small and inconspicuous technology. However the films go even further to make this technology invisible, rarely showing it to the viewer. In *Nosedive*, a close-up of Lacey's eye two minutes into the film suggests that something is in her eye, but the lenses are never discussed by a character, nor is the full scope of the lenses' vision modification revealed until the very end of the film, when Lacey finally sees the world without her contact lenses. In this way, this seemingly integral piece of technology--the main technological advancement, which defines this reality as futuristic--is not the focus of the film at all. And because the lenses are one of the only noticeable technological differences in this future, the difference between the present and that future is minimal. *Never Let Me Go* and *Under the Skin* don't show their futuristic technology at all, and simply allude to it through their narrative. These films both deal with cloned bodies; in *Never Let Me Go*, the main characters are told that they are clones, but the cloning process is not included in the visual narrative. Similarly, the main character in *Under the Skin* wakes up next to an identical copy of herself, whose clothes she takes and puts on herself. The scene implies that one of the bodies is a clone of the other, but this is not explained in the narrative, leaving one of the most obvious elements of futuristic technology invisible.

Other films do have more obviously displayed technology and, therefore, use the second mise-en-scene technique that allows their future to be defined as a near future. This technique is a juxtaposition between futuristic technology and 'present' architecture and clothing. For example, *Ex Machina*'s robot technology clearly places the film in the future. But other technology in the film isn't that unfamiliar. Caleb's headphones and cell phone are not different

than today; they look like Apple products. The first scene of the film shows Caleb working at Nathan's company, called Bluebook, and establishes enough similarities for the viewer to see this reality as near the present. The appearance of Caleb's work environment in the beginning of the film does not look unlike start-up companies today: groups of desks with computers and glass offices. Later, when Caleb visits Nathan's home, the architecture is modern, but again, not unfamiliar. Nathan's house is linear, many walls are made of glass, and it is settled among nature--not unlike a glass version of Frank Lloyd Wright's 'Falling Water.'. Another example of familiar architecture is Theo's apartment in *Her*: one bedroom, open floor plan, wooden furniture, big glass windows. The windows are also important in revealing the larger setting of *Her*. The city skyline doesn't include flying cars, holographic billboards, or unusual buildings. Instead, the skyline is rectangular skyscrapers, with repetitive windows, and a lot of gray: it's Chicago, or New York, or Seattle. Nothing about these buildings place viewers in a time ahead of their own.

Throughout these films, the characters wear simple, nondescript clothing. The clothing is never marked by patterns or logos, which keeps the viewer from being able to date the item. So it is easy for the viewer to imagine themselves wearing this clothing, and places these characters in their own present. In *Her*, for example, Theo primarily wears different colored button-down shirts and neutral trousers. In *Ex Machina*, the women wear simple color-blocked dresses, and Caleb and Nathan wear neutral jeans and tee-shirts. In *Be Right Back*, Martha and Ash wear solid colored sweaters and jackets. There is nothing new about this clothing; they are basic items that have existed for decades. Furthermore, some of these "basic items", are more easily placed in the past than the present. For example, the color blocked dresses in *Ex Machina* seem reminiscent of

the 1960s, while the collared shirts and dresses in *Nosedive* and *The Truman Show* are styled like the 1950s.

These retro clothing choices lead to the next mise-en-scene technique, which is to include elements of the past with its juxtaposition of the the present and future. Yet, within that picture of the past, there will still be futuristic technological advancements. For example, the mise-en-scene in *Never Let Me Go* mixes together technology from different time periods. Technology related to cloning is obviously futuristic, and the clones wear small tracking devices. But plenty of the other technology visible in the film is dated, like cassette tapes and boxy television sets. The sets and clothing in *Nosedive* and *The Truman Show* (in Truman's television world) are reminiscent of an ideal 1950s suburbia. In one of the opening scenes of *Nosedive*, Lacey is jogging through her neighborhood; the lines of white, cookie-cutter houses and the serene non-diegetic music suggest a suburban aspiration of quietude and order. The homes are not modern at all, instead the neighborhood could have been placed in the 1940s or 1950s, without drawing any attention. It's only when Lacey stops to stretch, and the camera is pulls back, that the futuristic highway above the houses is visible. This contrast is pushed even further in *The Truman Show*, where scenes that show an idyllic, perfectly groomed neighborhood also reveal hidden cameras, as well as their elaborate mechanisms in the production studio up in the sky. Truman's world--the futuristic television set---is made to look like the past, while the world of the television show fans is placed firmly in the time period in which the film was made. By placing the TV show viewers in the present, but including technology that is more advanced than that present, the film suggests that this is a near future. But, by also including elements of the past in Truman's world, the film further blurs the time-frame of the future i for the viewer, as the

film spends most of its time in Truman's version of the present. Blurring time in this way is part of the vagueness of a near future which makes these films messages more immediate. If the time-frame of the future is unclear, then it could be perceived as happening right now, making its message is more relevant to the viewer than a story set specifically one hundred years from the present.

Because *Under The Skin* has minimal dialogue, it forces the viewer to focus even more on what it presents visually to determine the characteristics of its reality. The film doesn't specifically use technology to mark its time period as the near future and in that way it is an outlier in this group of films; instead it is the unexplained occurrences and elements of the mise-en-scene which stand out as "not of the present." The locations that the main character frequents--busy city streets, a warehouse, a dance club, and the countryside--are not noticeably changed from the present. Similarly, the various modes of transportation--car, bus, motorcycle, and van--do not include special technological advancements. But her interactions within these spaces often are unusual or impossible, seeming therefore, to be vaguely of the future. For example, in one of the early sequences of the film, the main character is in a completely white, bright space. With the only shadows coming from the presence of the two bodies, there is hardly distinction between the floor and the walls. In this room, she takes the clothes off one body, which looks like her, and puts them on herself. The brightness of the room, and her actions on this seemingly unconscious body, begin to make the space seem medical, and an explanation for the two bodies would place her in some future where an individual could live longer than their own body. This type of medical space does not exist in the present, so it prompts the viewer to place it slightly in the future. In later scenes, she brings men back to a warehouse to seduce them.

Their clothing and her car places them in the present. However, as they enter the warehouse, the lighting changes, so that only the characters are lit, and they are surrounded by endless black. As they walk forward, the camera reveals that the floor is reflective, then the floor becomes water which the man sinks into and disappears. Again, the unexplained, changing nature of that room causes it to be perceived as more advanced than what is possible in the present, which pushes the film's time period from present to a near future. Changes in the mise-en-scene cause the space to be perceived as different than what is possible in the viewer's present, in that, suddenly, the individuals from the present are somehow transported to an alien, and unfamiliar time. This unfamiliarity though, is clearly intermixed with the present, as signified by the current fashion and technology. Therefore, it prompts the viewer's final explanation of the time-frame as only explainable by being set slightly in the future.

Besides the use of mise-en-scene, many of these near future science fiction films use non-linear narration, in the form of either flashbacks or jump cuts. *Under the Skin*, for example, uses jump cuts, which disorient the viewer in terms of determining time and space between scenes. Jump cuts draw attention to the lack of continuity in the story, adding to the viewer's disorientation in respect to the film's time-frame. It becomes unclear how the characters move between these disjointed scenes, adding to the already large number of unexplained occurrences in that reality. Furthermore, the spaces that are presented to the viewer often are unfamiliar, and unable to be spatially connected to the previous scenes. One of the first jump cuts in the film is from the all-white room, to a shot of a skyscraper, to Scarlett Johansson's character walking down the stairs in another building. The first space, in its futurism, cannot be spatially connected to the subsequent locations. The jump from a futuristic space to a space which resembles the

present links them together in a way that suggests the near future. Additionally, using jump cuts during the numerous driving shots creates a sense of elongated time, since it is unclear how long she has been driving. It adds to the viewer's feeling of spatial uncertainty, since the world outside of the car blends together and is unspecific to the viewer. This uncertainty works well in establishing the focus of a near-future science fiction film, which is the personal journey of an individual character. Since the only certainty in the film is the actions of the main character, the viewer must focus on her journey instead of attempting to ascertain the mechanics of the reality in which she lives.

Flashbacks are a common technique in traditional exposition, but they serve a different purpose in these near future science fiction films. Instead of serving an expositional purpose, such as revealing background information about the events which lead to the reality presented, these flashbacks only focus on aspects of characters' personal histories. The flashbacks only aid in revealing the process of a character's self definition by referencing their past actions. For example, in *Her*, the first half of the film is dispersed with flashbacks to Theo's former marriage. These flashback scenes don't show technology, or provide context about the society in which they live; instead, they focus solely on his deteriorating relationship with his ex-wife. As the film follows Theo's relationship with Samantha, these flashbacks serve as a point of reference, for both him and the viewer, as to how he has changed as an individual. By the end of the film, Theo has realized that he needs multiple types of relationships, including friendships, and learned how to "understand real emotion." Only through these flashbacks is the full transformation apparent. *The Entire History of You* works in a similar way, except that the characters control these flashbacks within the film. Whenever they watch re-dos of their life, it is like a flashback from

their point of view. Furthermore, the characters watch these “flashbacks” and often discuss them with other characters in the film; this allows the characters to reflect on themselves, and works as a method to reveal to the viewer events from long before the narrative of the film began.

Unlike most of the other films, *Never Let Me Go* is unique in its use of more traditional narrative techniques in establishing a specific time period. It uses intertitles describing and date past events that were instrumental in shaping the reality of the story. Additionally, each of the main sections of the film are subtitled with the year in which they take place. However, its use of these techniques actually blurs the past and the future, because it describes futuristic technological advancements as happening in the past. The story is told by one of the main characters through long flashback sequences bookended by voiceover narration. Each of these flashback sequences is marked with a title which states the date of that event. For example, the first flashback sequence is titled “Hailsham, 1978” and is about the narrator’s childhood. According to the story of the film, cloning individuals to later harvest their organs for transplants was the common medical practice of the day; clones were part of everyday life. This contradicts viewers’ knowledge of 1978 and of their own present. The film was released in 2010 and this technology wasn’t prevalent in 2010. Therefore, according to the viewer’s present, the technology depicted in *Never Let Me Go* is futuristic. The result of this contradiction is that the story presented is a plausible future from 1978, which is to say that this scenario is potentially still possible in the near future of today. If this technology could have been possible in 1978, then with current technological advancement, it stands to reason that something of this nature could be possible in the viewer’s present.

Navigating Self Definition

These near future science fiction films present several obstacles to understanding the self. As technology advances and mediates our reality, individuals identities begin to blur between many selves: the presented self, the interpersonal self, the observed self, and so on. In their humanistic perspective, these films care less about what that technology is, or how it came about, and more about how this mediation presents challenges to individuals defining themselves and being defined by others.

An essential part of self identity in these near future science fiction films begins with the most basic level: what does it mean to be human? Both the characters within the film, and the viewers who watch it, are presented with entities whose humanity must be evaluated. The films discussed in the following sections, “Humanity through Interpersonal Relationships” and “The Trouble with Bodies,” address humanity in two different ways. The first group of films explore how technology becomes humanized through interpersonal relationships, and stresses the importance of the viewer identifying with characters who interact with artificially intelligent systems. Only by other characters accepting the AIs as human can the AI itself, and the viewer, make that same evaluation. The second group of films present filmic techniques by which bodies are othered, and presented as obstacles to defining the entity in question as “human. This section demonstrates ways that the medium of film can blur the line between human and not-human.

Of course, self-definition cannot be fully satisfied by simply establishing humanity. The next challenge in these near futures is identification of an individual’s ‘true self’. The media, in its many forms, is often presented as the solution to this problem, as it becomes a lense through which the true self can be revealed. In the subsection, “Media and The Self”, discusses the ways

in which different forms of media can be used to aid, and at other times obscure, an individual's true self.

Humanity Through Interpersonal Relationships

In *Her*, *Ex Machina*, and *Black Mirror: "Be Right Back"* (2013), human characters knowingly interact with artificially intelligent bodies or systems (AIs). While each of these "artificially intelligent" entities serve different purposes in their respective realities, they are treated like any other human character, and, consequently, romantic relationships develop between humans and software. As a result, it could be said that these films are more about people than they are about technology. The relationships in *Her*, *Ex Machina*, and *Black Mirror: "Be Right Back"* investigate the authenticity of love, and how interpersonal interaction defines humankind. Questions about the relationship between emotion and intelligence are posed, and, ultimately, the films answer these questions differently.

Within each of these films, the AI must learn to define itself. They build their self concepts through the interactions they have with humans, and sometimes other AIs. For example, Samantha, in *Her*, verbalizes her discovery of different emotions to Theo, her user. At the start of her and Theo's relationship, her self concept is dependent on how Theo responds to her thoughts, and answers her questions. When he laughs at something Samantha says, she asks if she is funny, and then she adds that information to her self-definition, saying, for example, "I'm funny." Like Samantha, the software program of Ash has to figure out who "Ash" is. The first part of that journey is simple, a process of downloading data. But, as he interacts with Martha, he is missing information about how Ash acts in his daily life. AI Ash wants to define himself as the real Ash,

but needs more information. Because of that data gap, he simply follows Martha's instructions unquestioningly, building his concept of "Ash" entirely out of her reactions. But, Samantha and AI Ash have very different experiences; Samantha was given the opportunity to create a new, unique definition, and interpersonal interaction served as an addition to her self-concept. AI Ash however, was expected to emulate the real Ash, who had his own consciousness and personality. Interpersonal interaction was only able to confirm his accuracy, instead of prompting more individual thought. AI Ash struggled to define himself, because Martha had expectations of a self that he never knew.

In *Ex Machina*, Ava constructs her self-concept based off of images and what she knows of people, like the photos she has hung on her wall. This suggests that she wants to define herself as human but lacked interactions that would confirm whether or not she was perceived as such. She uses Caleb, the man who is supposed to be testing her intelligence, to glean whether she seems "real." Unlike AI Ash and Samantha, Ava doesn't spend as much time battling with her self definition; she seems to have already come to terms with herself early in the film. Instead she tries to figure out how humans define her, like Caleb, because she wants to know if she is passing his test.

While these films do touch on the AIs' processes of creating their self concepts, the films focus more on the humans who interact with them. The premise of the Turing Test, which is referenced in *Ex Machina*, is that, when an outside observer studies a conversation between an AI and a human, she or he would have a no greater than chance of guessing which is which than mere numerical probability. The Turing Test isn't used correctly in *Ex Machina*, in terms of Caleb and Ava's relationship, but it is transposed onto the viewer of these AI films. During

these films, the AI characters are humanized, and the question of whether or not they are human, or deserve human lives becomes increasingly more difficult to answer. The process of humanization is composed in part of technological innovation, but is mostly dependent on the interpersonal relationships that the AIs form with other, human characters. Based off of these relationships on screen, the viewer can draw conclusions about the AI's humanity.

Ex Machina and *Her* demonstrate the process of forward humanization due to intimate interpersonal relationships over the course of the film. In *Her*, Samantha begins as a software program that is designed to help its user with everyday tasks, much like Siri on Apple products. The human user, Theo, got to choose her gender during the set-up process of the program. Once she is activated, Samantha completes routine, convenient computer tasks, like organizing emails, setting reminders, and taking notes. The program's objective is to meet the user's everyday needs through voice activation and smart technology. The technology is advanced, in that Samantha's voice sounds human, but the intention does not seem to be to create a unique, human personality. However, Samantha's role evolves as she and Theo develop a friendship. As discussed earlier, Samantha tells jokes and asks questions to Theo; in return, Theo shares more intimate details about his day with Samantha. As the film progresses, their interactions change from command and response to more equal-footed conversations. Due to this interpersonal change, Samantha is treated as an equal instead of an assistant, leading to the start of her humanization. As their conversations become more intimate, Samantha's smart technology seems also to adapt, because she starts to build a distinct personality in response to Theo's need for companionship. Similarly, in *Ex Machina*, Caleb's conversations with Ava increase in intimacy over the course of their sessions. At first, Caleb takes an analytical approach to speaking with Ava, and considers her

only as a technological phenomenon, but after Nathan's prompting, he begins to consider how he feels about Ava, and how Ava feels about him. Their sessions change so that Ava can reciprocate questions, adapting their relationship to be more equal.

Then, these relationships continue to evolve from friendship to romantic. A large part of Theo and Samantha's relationship is centered around Samantha's discovery of life; which eases Theo's loneliness and isolation. Theo teaches Samantha that it is okay to acknowledge her feelings and express her thoughts; Samantha encourages Theo to leave his apartment and enjoy the world. If a viewer was to start the film at the middle instead of the beginning, she or he would find that much of their relationship looks like a human, long-distance couple. Despite her lack of body, Theo and Samantha have both a physical and emotional relationship, and express their love for one another. In *Ex Machina*, Ava begins to flirt with Caleb, saying that she hopes he has been watching her on the cameras, and that she often thinks about him. At first, Caleb is confused about the purpose of her sexuality, but then he seems to return the feeling, watching her at night and worries about her well being. They begin to talk intimately about Caleb's past and make plans to escape and live together. As a system that adapts to its users needs, Samantha seems to be meeting Theo's deeper, interpersonal need for companionship, and in turn that causes her humanization. Similarly, Ava responds to Caleb's loneliness at the facility and uses their romantic attraction to bring them closer.

Ava's humanization is dependent on the relationship between Caleb and Nathan. At the end of Ava and Caleb's second session, she causes a power outage in order to tell Caleb not to trust Nathan. Here Caleb is given a choice which tests his perception of Ava's humanity. If he trusts Nathan and reveals what Ava said, he would be acknowledging that Ava is a machine, and

fulfilling his job as the administrator of the test. Instead, he doesn't say anything to Nathan, which begins Ava's path to humanization. By choosing Ava and not trusting Nathan, he places his trust in a machine, because he has begun to believe she has consciousness. The next time they speak privately, Ava asks what would happen if she fails the test, because she is afraid of what Nathan would do. Caleb finds out that Nathan will wipe her memory and make an upgraded model, which Caleb says would essentially "kill her." This perception of Ava dying suggests that Caleb sees her as more human than machine.

Samantha's transition from a computer program to a rounded, humanized character is dependent on how Theo and other characters perceive her. For example, Theo goes on a double date with Samantha and two other human characters from his work. When Theo says that he is dating an OS (operating system), the other couple is unfazed. They simply schedule a time to hang out. During the date, the couple doesn't mention Samantha's lack of body; they accept her and treat her as another human, teasing her about Theo, asking her about her life, and making jokes. Their acceptance of Samantha marks an important step in Samantha's process of humanization, because now not only does Theo see her as a person, but she is passing for human with outsiders. Towards the end of the film, it is suggested that many OSs develop friendships or relationships with their users, further legitimizing their claim of humanity.

Within *Ex Machina* and *Her*, the humanization of AIs is presented through not just the AI's journey, but also through the human's journey to understanding what it means to be an AI, presenting human and AI as more similar than different. When Theo reveals to his ex-wife that he is dating an OS, she looks at Theo with pity, and says that he could never handle "real emotion." Yet *Her* suggests through its humanization of Samantha: that Samantha and Theo's

relationship is based on real, human emotion. Furthermore, it is suggested that even humans can struggle with “real emotion,” as it is only through his relationship with Samantha that Theo finally learns to love. In *Ex Machina*, Caleb discovers that Nathan has made many more AIs, and has stored them throughout the facility. This revelation causes Caleb to question his own humanity. During the Turing Test, the administrator of the test shouldn’t know which participant is the robot, so Caleb realizes that he could be testing his own consciousness. He cuts his arm to try to see underneath his skin, checking for a mechanized mesh structure. And despite seeing his own blood, he peels apart his skin even further, displaying difficulty convincing himself of his own humanity. Both of these moments in these films equate AI and humanity in a way that is not new to AI films. AIs bring “awareness of our own level of artifice, of constructedness, of how we often seem controlled by a kind of internalized program not so different from the sort that drives the artificial being” (Telotte, 15). Authenticity of one’s own humanity is complicated when one must analyze whether they can recognize the difference between human and AI. These moments suggest that the difference between human and AI is less than originally thought, which paints humanization as more attainable.

Although *Be Right Back* begins with a humanized AI, its facade is chipped away as Martha realizes that it cannot replace the real Ash. Initially, when Martha gets the software, she is tentative about using it and doesn’t give the program access to all of her “Ash data.” Using only the public profile and social media, the program runs through her phone, and, once it’s downloaded, she receives a phone call from “Ash.” After her first conversation with AI Ash, she allows more and more access--to her voicemails, to Ash’s email, and more private documents--anything that could help the software learn to be more like Ash. Martha talks to AI

Ash all the time, just like she spoke to him when he was alive, humanizing the AI for the viewer. In part, the perception of AI Ash's humanization is dependent on the narration of the film. Since the viewer's perspective of AI Ash is limited to the interactions with Martha, and Martha doesn't tell any other characters about the AI, the viewer must decide on the "human-ness" of the AI based off of Martha's reactions alone. Martha's phone conversations with the AI Ash are almost identical to her conversations with the real Ash, so without context, the viewer would most likely have an equal probability of guessing whether her phone conversation is with the real Ash or the AI.

The relationships that these three AIs, Samantha, Ava, and Ash, have with human characters help the viewer define their humanity. The Turing Test is brought to the forefront for the viewer because, "the test for whether [an AI] is human is whether the audience can fall in love with [them]" (Alpert, 1), and the viewer's love can align with the human characters. Their trust made the AIs seem human. Therefore Samantha and Ava, having gained their users' trust and affection, become humanized and assert their independence as individuals. AI Ash begins to fail the Turing Test as Martha stops trusting him and focuses on his artificiality, causing it to lose the humanization it once had.

As demonstrated in these three films, a test of artificial intelligence is dependent on the AI's interpersonal, and more specifically romantic, relationships. These films' lessons are an "acknowledgement of the human need to connect with others" (Alpert, 1), and this is an important part of creating humanity. In these films, if someone can be in love with an AI, or an AI can fall in love with a human, then the AI can pass the Turing Test. This assumption rests on the perception that love is unique of human intelligence. In fact, it is these romantic relationships that help the AIs create their self concept and recognize themselves as individuals. This suggests

a more complex definition of humanity and consciousness itself, as it must be a combination of both intelligence and emotion.

In *Ex Machina* Nathan asks Caleb, “what imperative does a grey box have to interact with another grey box...can consciousness exist without interaction?” Nathan suggests that the romantic, sexual impulse is a place between intentional and random, and that “in-between place” is consciousness. It is revealed at the end of the film that Nathan was actually testing to see if Ava could use Caleb to escape. In order to use Caleb, she had to gain his trust, affection, and convince him that she was humanized enough to need protection. This required Ava’s understanding of how love worked, and it is assumed that only something with true consciousness could understand emotion, especially love. It didn’t matter for Nathan’s definition if Ava’s actions were actually caused by the emotion of love, but rather that Caleb could see in Ava the potential for love. Caleb saw her as humanized, and her love as real, despite the fact that she was a machine and that she was lying. This made him trust Ava over Nathan, and so he helped her escape. Even if Ava didn’t truly love Caleb, she spared him Nathan’s fate, showing that she had the capacity for sympathy and understanding, despite her prioritization of her own goal of freedom.

Samantha serves as the ideal example of consciousness as a combination of intelligence and emotion. Throughout *Her*, Samantha’s intelligence increases exponentially, but alongside traditional ‘computing’ intelligence, she becomes more advanced emotionally. As discussed previously, Samantha begins to experience human-like emotion as a result of her and Theo’s relationship, such as insecurity about her lack of body, jealousy of Theo’s ex-wife, and, of course, love for Theo. Her emotions become humanized in their complexity, and, not only does

she verbally express this process, but she also shares it through her music composition. By creating her own music based off of her experiences, Samantha demonstrates her capacity for creativity, which is a combination of intelligence and emotion. So Samantha evolves into a being that is more than just an operating system, because she can learn and adapt like a human, and also because she can love and create--her expression of Nathan's "in-between place." It is suggested at the end of the film that she will continue to evolve further than this "in-between place"--to a type of humanity that even humans have not obtained.

AI Ash's humanity was dependent on a replication of the feelings of love between Martha and her deceased husband. In this case, AI Ash passed as human for so long because he was able to replicate the real Ash through processing data. But as Martha talked to him more often, and put him in a body, the flaws of replication became apparent. Martha could tell that AI Ash didn't have more than intelligence, because, although he could learn how Martha wanted him to act, he shows no evidence of emotion. Despite her knowing this, Martha couldn't simply get rid of AI Ash, because when he pleads for his life, she sees a spark of humanity--a computer would not know of death in the way that a human does. The film emphasizes the complicated, intuitive, illogical part of humanity and of love. Martha's love for her husband is personified through attempts to transfer humanity to the AI. While she recognizes that she cannot replicate her husband, there is an illogical part of her that keeps AI Ash anyway, because she couldn't bear to see her husband leave twice.

Through interaction between AIs and human characters, these AI films suggest that emotion is unique and essential to defining humanity. *Ex Machina* and *Black Mirror: Be Right Back* suggest that there is uncertainty to understanding human emotions, and that replication can

sometimes be enough to prove an AI's humanity, at least at first. Even if it is the human who loves the AI, the ability to love is supposed to be truly human, and the object of that love is granted some humanity as a result. Perhaps Ava or AI Ash have the potential to authentically love also, but are still learning. By contrast, Samantha demonstrates that the combination of intelligence and emotion can even transcend human definitions of consciousness in *Her*.

The importance of love and interpersonal relationships in defining humanity can extend beyond the scope of artificial intelligence. *Under the Skin* and *Never Let Me Go* focus on characters who do not fit the traditional definition of humanity, but nonetheless use interpersonal relationships to determine whether these characters are worthy of human status. Although the main character in *Under the Skin* interacts with multiple human characters, she maintains her physical and emotional distance for much of the film. For the first half of the film, her encounters are seductive, but not emotional. As she seduces men, she walks away from them, dropping her clothes, but never letting them close enough to touch her. As they walk towards her, they are swallowed by the floor, and she is alone again. This physical separation marks her as being separate from these humans, and unwilling or unable to interact with them. Later in the film, when she leaves the city, she has her first moment of emotional connection. This new interaction is markedly different, as she relinquishes her former control, and is more open with another person. The following romantic encounter is not based on her deliberate seduction, but instead on an emotional, human attraction; she finally allows herself to touch another person and to be touched. Although her encounter causes her to realize that she is not human, for the viewer, this moment seems to mark her as most human, due to her development of an interpersonal relationship.

In *Never Let Me Go*, the main characters are clones, and their humanity is called into question by the society of the film and by the clones themselves. Instead of tracing the societal decision however, the narrative follows three clone characters as they grow up and fall in love with one another. Their journey to learn about romantic relationships humanizes them, as it is not unlike the journey of any other human. For example, in their teenage years, Kathy notices that Ruth has begun to copy an affectionate gesture from another couple who lives with them. It is important to note that replication isn't a process that is unique to non-human characters, as it is also part of the normal human process of socialization. When Ruth copies a romantic gesture, the film suggests that their uncertainty about relationships is a part of growing up; it is natural for the expectations of one's first romantic relationship to be based on the observation of others.

Furthermore, when the characters go into town, they blend seamlessly with the human characters who live there. They are perceived as a group of friends, not a group of clones. Although the futuristic element of the film is based on cloning, the film itself spends very little time on it, even with respect to clones being evaluated for humanity. Instead, its focus on the depth of its characters' interpersonal relationships allows the viewer to identify and empathize with them as human. It is about these three friends growing up, navigating their love life, and coming to terms with death. Towards the end of the film, Kathy and Tommy finally admit their love to one another, and hope that they can use their love as an exception to their donation process, because love should prove their humanity. While their appeal is rejected by the society of the film, Kathy maintains this opinion through her voice over narration at the end, and this seems to be the final message of the film. She believes that it is human to experience love and loss, and that their experience of love, while it is shorter lived, is not unlike the experiences of any other human.

The Trouble With Bodies

As was demonstrated by human characters' reactions to AI bodies, or lack thereof, perception of human-ness is often complicated by the presence of a body. In these near-future science fiction films, the creation of identity is explored and often anchored by the need to understand what it means to be human. It seems that being human is tied somehow to the body. Therefore, the representation of non-human characters on screen is imperative to posing these questions of self, first through acting choices which lead the viewer to make decisions about who is human, and second through narrative techniques of embodiment, and third through the othering of bodies.

Despite knowledge of AI characters being computerized, they are voiced and played by human actors, which influences the viewer's perception of the character's humanity. For example, Scarlett Johansson voices Samantha in *Her*, essentially playing the near-future's version of Apple's Siri. Unlike Siri, there is no attempt to smooth or perfect Samantha's voice; Samantha's voice sounds human. This is theoretically supported by Barthes' concept of "the grain," wherein he argues that voice is inherently tied to "the materiality of the body" (182). As viewers, the presence of a voice, even when it isn't visually associated with a body, will be perceived as related to the man or woman who owns it (Barthes 188). Furthermore, Johansson's voice is imperfect and rough, "forever retaining an individual flavor [and] texture", and this lack of standardization reminds the viewer of its materiality (Silverman 44). Besides just using her voice for language, she laughs, she sighs, she changes tone, and she conveys emotional experiences in a way that can only seem human. It is a testament to Johansson's acting ability that without ever possessing a body, Samatha's emotions are apparent and audible. It is human to

speak imperfectly, to have awkward silences, or giggle uncontrollably; the choice to play Samantha in that way allows the viewer to empathize with her, and consider her as another human character. Similarly, there are moments when Alicia Vikander, who plays Ava in *Ex Machina*, uses acting choices to bring human-ness to Ava. They are particularly effective in moments of observation in the narrative. For example, both Nathan and Caleb are able to observe Ava in her room via a television screen. In these moments, little ‘human’ gestures, since they occur when she isn’t taking part in their Turing Test, suggest that she may be conscious, and possibly human. Some of these gestures, such as touching her face and examining herself in the mirror, show Ava’s awareness of her own body. This awareness is similar to a human awareness of appearance, and demonstrates Ava’s uncertainty in her sense of self. This uncertainty and concern with appearance can be empathetic for the viewer, as in these moments Ava isn’t trying to convince another human that she is conscious. These gestures suggest instead that she is self-conscious.

Just as important as the portrayal of AI characters as human-like is the portrayal of AI characters who don’t possess enough human qualities. Subtle acting choices help the viewer identify which characters are breaching human-ness and which are a computer program in a body. In *Ex Machina*, there are actually two different AI characters; however, only Ava is being studied for signs of consciousness. Kyoko (Sonoya Mizuno) lives in the compound with Nathan, however Nathan doesn’t introduce her as another AI. Only through small gestures and body language does it become apparent, both to Caleb and the viewer, that she is also an AI. Kyoko doesn’t speak, or seem to understand much that is said to her. Yet, she seems to follow commands, and is actually very task-oriented. For example, she serves dinner to Nathan and

Caleb, and seems to understand requests related to that task. Mizuno portrays Kyoko so that she fluidly, almost automatically, reacts to her ‘programmed’ tasks, but displays confusion in “un-programmed” scenarios. Her confusion is shown through a lack of movement, hesitating until almost frozen, until she is given a new command. At one point, Kyoko and Caleb are alone in a room together, and she begins to undress. Caleb buttons her shirt back up, but she automatically starts undoing the buttons again. The contrast between Mizuno’s expression of complacency and her action of assertiveness suggests that the drive behind her action is an automatic process, instead of an expression of desire. Moments like this suggest a lack of consciousness that leads the viewer, and Caleb, to realize that she is not human.

In *Her* and the beginning part of *Be Right Back*, the AI characters are bodiless, yet seamlessly identified as characters to which the viewer can evaluate for humanity. As ‘having a body’ is often tied to our concept of being human, it is important to understand how characters that we don’t see become embodied on-screen. This is achieved through the technique of embodiment through a voice over. In a more traditional narrative, a character may be introduced on-screen, then as the scene changes, continue their monologue through voiceover narration. During this transition, the viewer understands that the character has a body and that they are part of that world still. *Be Right Back* introduces AI Ash in a similar way. First, the human Ash is on-screen, and his demeanor, voice, and body is established. Later, after he dies, Martha is leaving voicemails and talking to Ash like he is still alive, and then when AI Ash is introduced, it is like Ash has finally responded. Since they begin speaking over the phone, a seamless transition from seeing human Ash to hearing his voice helps the viewer see the AI as potentially bodied. Ash’s voice is always situated in the diegesis, either from a phone or other speaker. The

effect is that of a long distance relationship; the viewer can easily imagine that the speaker exists in a body somewhere, and even knows what Ash's body would look like from his image previously in the film. Therefore, it is simple to embody AI Ash and to consider him as potentially possessing a human conscious.

Her is different in that Samantha is never bodied, yet Johansson's voice-over causes the viewer to consider her as another bodied character. This is established due to the scope of her presence. Samantha is not confined to one device. For example, she speaks through Theo's work computer, his home computer, his phone, and his game station; essentially, she can "move" anywhere in the physical plane despite her lack of physical existence. Towards the end of the film, Samantha and Theo have a getaway to a cabin in the woods. The idea that she can "go on a vacation" suggests that she is actually traveling somewhere, and implies a type of body. Similarly, she has the ability to communicate with people other than Theo. For example, she contacts and communicates with a publisher through email, and she can make calls and speak with other humans over the phone. Again, this demonstrates her independence to act within the physical world without tying her existence to Theo. In addition, Samantha also communicates and moves outside of the physical realm. During that same cabin vacation, Samantha "leaves" the cabin to visit with another operating system. Theo cannot get ahold of her at all, which asserts her body in a way that is even more concrete. Like humans, she now is able to physically leave a place, and it is her choice where and when she does so. Secondly, her voice is tied to her presence in a way that traditional voice over narration is not always. That is to say that she only speaks in a place where she is embodied and present. Instead of covering a wide range of locations or montage sequence, in *Her*, Johansson's voice over is used almost exclusively in the

location that she is inhabiting, and is part of an interactive conversation, tying her to the physical parts of the location, such as Theo or other characters. Similar to the AI Ash, her voice is tied to the diegesis, so that her ‘body’ is maintained within the parameters of the world as it exists on screen. The use of voiceover does not assert the character of Samantha as more powerful or omniscient, as it does in other films (Silverman, 163), instead it is kept contained and embodied like any other character. Lastly, Theo, and other human characters, look at Samantha as if she is physically embodied. For example, when Theo and Samantha go on a double date with Theo’s co-workers, Theo sets down his phone, which is where Samantha is located. Then, when someone speaks to Samantha, they look at her by looking at the phone, and more specifically, by looking at the camera, which substitutes for Samantha’s gaze. Therefore, the interactions between her and other human characters suggest that she is physically present, and therefore Samantha is embodied without ever having a body.

Part of deciphering what it means to be human can also mean asking what is not human. It is in this query that the othering of bodies affects the perception of human-ness and self definition. In AI films, the ultimate goal is to recreate human consciousness, and that usually entails replication of the human body in order for these AIs to blend with human society. Yet, recreated human bodies have the potential to be othered if they are not convincing or accurate, and when they are othered, it causes discomfort and uncertainty when both the AI, and other’s evaluating it, attempt to define its humanity.

In Freud’s essay, “The Uncanny,” he defines the theory of uncanny as it relates to horror film. As the genres science fiction and horror often overlap, it is important to understand the psychological effect of othering bodies in science fiction. The uncanny relates to the German

word *heimlich*, which are defined in Freud's essay as "belong[ing] to two sets of ideas, which without being contradictory, are yet very different: on one hand it means familiar and agreeable, and on the other, what is concealed and kept out of sight" (199). Therefore, something is uncanny, when it becomes *unheimlich*, and that which is concealed comes to light (200). Many of the first examples that Freud analyzes refer to the uncanny effect of human bodies, wherein "In telling a story, one of the most successful devices for easily creating uncanny effects is to leave the reader in uncertainty whether a particular figure in the story is a human being or an automaton" (202). It is this uncanny effect that often causes the viewer to see AI, and other replicated humanoid bodies, as othered. First, in that they appear familiar, it is easy to recognize them as appearing human. Yet it is revealed through various methods that their bodies are not like the familiar human bodies that are expected. Both the uncertainty in defining the body and the revelation of its deceptive appearance create an uncanny effect, which causes the viewer and, in some cases, characters in the film, to see the bodies as othered. Then, othering the body creates questions about how one defines themselves.

When Martha upgrades AI Ash, taking a doll-like body out of a box and placing it in lukewarm water to "grow" in a bathtub, Ash's clearly inhuman body begins to other his character. The following sequence of shots seem to acknowledge the thin line between science fiction and horror, bringing the perception of AI Ash from human to something other. That night, as she waits for AI Ash's body to grow, Martha's home is full of shadows, and she tries to listen for noises from the bathroom. A cut to the bathroom doesn't seem to show any sign of life; the bathtub is completely surrounded by darkness. The following shot of Martha is from the outside of the house looking in, as she nervously sits in the kitchen, as she hears some creaking upstairs.

These moments are reminiscent of a horror movie. The effect of this sequence is that once placed in a body, AI Ash no longer seems as safe, as human, as it had in the earlier part of the film.

When Martha notices that AI Ash is missing some freckles, he simply produces them on his skin, drawing attention to his artifice; clearly he is not human. During their first night together, and the nights following, Martha is very bothered by AI Ash not needing to sleep. She says that it creeps her out. To correct that, AI Ash just closes its eyes. As she studies his body, Martha notices his chest isn't rising and falling either; AI Ash doesn't need to breathe. Additionally, she knows that AI Ash is pretending to breathe and sleep, so despite its corrections, Martha is acutely aware of its artifice. When this artifice is revealed, the uncanny effect is that AI Ash loses some of his empathetic qualities for the viewer, and eventually even Martha cannot see him as being the real Ash. Now instead of seeming like the real Ash, AI Ash makes the viewer, and Martha, wary and uncomfortable. AI Ash becomes defined as a computer program only.

Similarly, both AI's in *Ex Machina* reveal their circuitry to Caleb. From the beginning, parts of Ava's body are transparent, showing the mechanical nature underneath. Yet as the film goes on, and her and Caleb become closer, she dresses herself in a way that shields all of those transparent sections, in an attempt to seem more human. In this way, the uncanny effect is muted by her disguise, and the other ways in which her emotions seem human. Kyoko is the opposite. At first, she looks perfectly human on the outside, but later in the film, she peels back her skin to reveal her machination. Peeling back skin is uncanny, first, in the discomfort that it creates through the revealing the underside of a body organ, as this is something that should not be brought to light. Second, it reveals a mechanized body that has been concealed by artificial flesh, completely othering a body which had been assumed human for half the film. The mechanized

body makes it more difficult for the viewer to define which, if any, of these AI's possess consciousness. But as Caleb sympathizes with Kyoko, and chooses to believe Ava over Nathan, he overlooks their othered bodies. Perhaps the film suggests that despite their mechanical nature, these AIs might have other qualities which could assist them in being defined as human. In fact, Caleb's reaction to viewing these othered bodies suggests that even humans have body trouble. He slices open his own arm, seeming to be unsure what lies underneath his own skin. This act serves to confuse the viewer even more, as again the act of cutting through skin, and seeing blood, is uncanny and othering. Caleb's body becomes confused with the other othered bodies in the film and seems to blur the line between human and un-human, suggesting that the self-definition process is much murkier than was set out initially by the film.

It isn't only AI films in which the body can be othered and presented as an obstacle to self-definition. *Under the Skin* and *Never Let Me Go* also focus on bodies which are othered, and as a result the those characters struggle to define what it means to be human, and whether or not they fit in that category. Both films focus on bodies that are organic, rather than being made of synthetic material, but alien in their origins.

Never Let Me Go focuses on the experiences of human clones. Although, genetically, their bodies are identical to human genetic make-up, an on-going debate is presented as to whether they should be given the same ethical rights as humans. In this near-future, the question becomes whether humanity must be unique, as the clones are simply replications of other, already existing humans. The clones' bodies are othered because they are replicants of a natural, living human, thereby making the creation of their bodies unnatural. What makes these characters uncanny, and therefore othered, is that they are doubles. Freud states that doubles can

be in many forms, but nevertheless are “a thing of terror,” because “they are harking back to particular phases in the evolution of the self-regarding feeling, a regression to a time when the ego had not yet marked itself off sharply from the external world and from other people” (212). Therefore, their identity is confused with the identity of the original person, in that the existence of the clone reminds us of a time when the self was not clearly defined and was somehow combined with the identities of other people. A clone would be the following of Freud’s cases, where “we have characters who are considered identical because they look alike. This relation is accentuated by mental processes leaping from one character to another...so that the one possesses knowledge, feelings, and experience in common with the other” (210). Although in the film, the other half of the identical pair, the original human, is not shown, there are moments where the characters wonder about their originals, and the possibility that their feelings and experiences are simply due to the feelings and experiences of the original. For example, Kathy is confused by her budding sexuality and afraid that her sexual urges are more intense than those of “normal” people, she seeks out a pornographic magazine. She searches the faces of the women in the magazine because she thinks that the origin of her sexual drive must be due to the identity of her “original”; Kathy believes that the woman whose cells were cloned must have been a prostitute or a porn star and that her sexual experience is connected to the experiences of that woman. The clone characters acknowledge that their originals are most likely from lower ranks of society, because they would have been paid to donate their cells. Therefore, doubling consistently obscures their evaluations of themselves, as they assume that genetically, their identities are linked to the experiences of their original. Often the characters define their own well being or “success” by what they think of their original. Later in the film, Ruth, who is also a clone, finds

out that someone saw a travel agent in town that looked like her; immediately Ruth believes that woman is her original. Ruth's entire demeanor changes after hearing about this woman, because this woman is not homeless or a prostitute; instead, she lives a middle class life in a nice office. Ruth adapts her self definition to match the experiences, that she assumes, of the original. She believes that she is better than the other clones, because her original was of a higher social status.

For the viewer, the "mental connection" between the doubles others their characters, as the film ultimately asks whether these clones deserve autonomy and control over their own life. When Kathy and Ruth link their experiences, their feelings, and their self-definitions to those of other human characters, whether they are visible or not, it calls into question their autonomy. As Freud explains, when "the subject identifies himself with someone else, so that he is in doubt as to which his self is, or substitutes the extraneous self for his own," the viewer experiences the uncanny (210), and when these characters become uncanny, it becomes difficult for the viewer to empathize with them and ultimately to evaluate them as human. The uncanny effect of doubling causes Ruth and Kathy's bodies, despite their human genetic makeup, to be seen as something other than human.

Furthermore, the language associated with their bodies serves to dehumanize these characters. In this near future, clones were created to be organ donors; the clones themselves are the technology of medical advancement. The clones live their lives into their mid twenties and then undergo a series of surgeries, removing their essential organs until they die on the operating table. This process, when considered in the frame of human life, would be seen as painful and cruel, and a human rights violation. However, in the film, specific terminology serves to desensitize the viewer, and the characters, to this process; it frames the clones as a piece of

technology to be used, instead of an individual with a life. First, these surgeries are called “donations.” The idea of ‘donating’ can include connotations of charity and choice. In real life, humans can also chose to be organ donors. But in this reality, clones “donate” at the prime of their life, and serve no other life purpose besides their donations. When it is revealed to the clone characters their purpose in life, however, there is no display of outrage, and they usually discuss their own future donations, or the donations of their friends with relative ease. This dissociation from their own bodies can also affect the viewer’s perception of their bodies. The characters’ acceptance of their bodies as donations, by perpetuating the terminology, seems to suggest complacency, and suggests that the viewer too can accept this frame. In a way, it makes these characters’ organs seem not to be a part of their bodies, nor their bodies a part of their identity. They are simply incubators for organs which, when they are at their best functioning capacity, will then be “donated” to “real people” who need them. An even more abstract term describes the end of the donation process: “completion.” After a number of donations--sometimes five, sometimes only two--the donor will die on the operating table. There is arguably nothing more human than the struggle to define one’s life and death, and yet, in this reality, death is simply “completing” their job as living organ receptacles. Again, the use of this terminology alienates the clone characters’ identities from their bodies and suggests that, instead of humans with autonomy, they are containers that serve a purpose; when this purpose is completed, so are they.

Although the techniques discussed above set up the clones as “other” for much of the film, it is important to note that the end seems to suggest that, perhaps, clones and humans are more alike than they are different. While the term, “completion,” can dehumanize the process of death when it describes the completed surgery process, it could also be described as the

completion of one's purpose. The clones don't have much time to be alive, because they serve their purpose quickly. In Kathy's monologue at the end of the film, she wonders if anyone really has enough time, and seems to equate clones and humans because they experience the shortness of life through a struggle with one's purpose. Completing one's life doesn't necessarily need to have a negative or dehumanized connotation, instead it could be about an end that every person will one day reach. Furthermore, she suggests that her romantic journey with Tommy is not unlike any other human's romantic journey, because the experience of love and loss is universal---it is impossible to ever feel as if you have had enough time with a loved one. This monologue could combat some of the othering effects in the film, as Kathy, a clone, describes some universally human experiences, perhaps it is possible for the viewer to empathize once more.

In its title alone, *Under the Skin*, suggests the importance of the body. The film focuses on a female character whose goal seems to be to lure men to their deaths using only the power of her body. Yet it becomes apparent that there is something inhuman about this character. Again, an uncanny effect creates issue for the viewer's evaluation of the main character's humanity. In this film, the repetitive form creates an uncanny and othering effect. One of the final elements of the Freud's uncanny is recurrence, as "whatever reminds us of this 'inner compulsion to repeat' is perceived as uncanny" (215). Scarlett Johansson's character in *Under the Skin*, seems to be compulsively repeating the same sequence of actions to lure men; she offers men rides, she brings them back to a warehouse, she undresses, and she walks backwards until the men are swallowed by the floor. Additionally, since the film never sets up a time or context, there is no way of knowing how long she has been at this ritualized practice. The way that she uses her body

in this repetitive action, to entice and entrance men, causes her body to be perceived as uncanny, and othered, despite its human appearance. This lack of human-ness is supported later in the film, when she finally has a sexual encounter. During this scene, and the sequence following it, the film confirms that her body is not human. First, just as she is about to initiate sex, she looks down in horror at her own body, and seems to realize that she is missing genitalia. Then, when she escapes to the woods, she pulls off her skin, visually demonstrating the conflict of the body and the self. She knows that she isn't human, and it is confirmed for the viewer, and in this moment, she has lost her concept of self due to her othered body.

Othered bodies, or the lack of a body, can complicate an individual's self definition as physical embodiment is so often tied to self concept. These films, which depict non-human characters, *Under the Skin*, *Never Let Me Go*, *Her*, *Ex Machina*, and *Be Right Back*, emphasize the important role bodies play in our perception of ourselves, and the difficulty faced when our bodies don't fit with the expectations of normalcy. However, through their focus on interpersonal relationships, this group of films suggests that there is more to humanity than its body, and that meaningful relationships may help individuals who don't fit in to accept and understand themselves.

Media and The Self

In many of these near-future science fiction films, the presence of different media forms mediates the perception and presentation of the self. In doing so, the narratives of these films ask what is the true self," and, furthermore, if there is a true self, how is it discovered and mediated

by media technology. The media explored range from traditional hand-made art forms, to self-reflectively examining film, and to the media of our present: social media.

The most traditional forms of art, namely drawing and painting, are presented as a window to the self's inner-most circumstances. Traditional art forms maintain the "here and now," which is to say that this type of art is unique due its hand-formation by the artist (Benjamin 21). While the other media from these films, photography and film, replicates, this form of art captures a unique aura of both the artist and the moment in time in which it was created (Benjamin 23). Similarly, modernist art movements, such as surrealism and expressionism, seek to portray the world more abstractly, and explore the subconscious and internal circumstances of the artist or the society as a whole (Tate). These perspectives on art are important in the ways that art is theoretically tied to the artist's self. It is often proposed that a method to understand an inner, or true self would be to look at an individual's art. In both *Never Let Me Go* and *Ex Machina*, characters use art as a defense of their unique self. In *Never Let Me Go*, the students at Hailsham are instructed to create art during every year of their education, some of which is then chosen by Madame to be hung in her personal gallery. The value of creativity is frequently stressed by the Hailsham guardians, and students often evaluate their own worth based on whether their artwork is taken to the gallery. It is revealed, later in the film, that the gallery was used as evidence that clones might have souls. Similarly, in *Ex Machina*, Ava begins the film by only drawing representations of the world visible to her, usually the view from her bedroom window. But Caleb, as part of his task to test her consciousness, asks that Ava draws something else, something that she feels, implying that, if she is able to do so, it will prove her humanity. In both of these films, the characters of the future portrayed in the film believe that

art could be the key to understanding the complex notion of self, especially in the cases of individuals whose humanity is unclear. Yet their resolutions suggest that art alone may not be enough to determine the true self. Tommy, in *Never Let Me Go*, presents the case that artistic ability, especially at a young age, is too trivial to determine the fate of an individual. The fact that Tommy never had any artwork chosen for the gallery haunts him for years after leaving Hailsham. He didn't have inherent artistic ability, so he had to train himself to channel his creativity and practice his drawings. If a person is not traditionally artistic, does that mean that they are lacking some deeper "true self," that they might not have a soul? And as Kathy later learns, the argument for art as evidence for a soul was rejected by the scientists in that reality. Similarly, Ava attempts the modernist notion of art in *Ex Machina*, but Caleb determines her consciousness without using the art as evidence. Again, the resolution seems to argue that while art may reveal some deeper aspects of the self, it cannot be the determining factor.

Moving chronologically in art history, the advent of photography introduces new methods for revealing the true self. *Ex Machina*, *The Truman Show*, and *Black Mirror: The Entire History of You* self-reflexively investigate the notion of film as truth. Film, as a medium, is unique in its ability to capture reality. As Andre Bazin has stated, "photography and cinema...are discoveries that satisfy...our obsession with realism" (161). Not only does the camera record "reality" as it is, it does so objectively, as "the image of the world is formed automatically, without the creative intervention of man"(161); in French, the lens itself is called "objectif," which points to the mechanical objectivity created through the camera. This objectivity is important in our use of film to understand the self, as it lends credibility to the form

(162); therefore the self presented on-screen must be the “real self,” since it is recorded objectively.

In the cases of these near-futures, film serves as surveillance technology. First, as the individual is not in control of the action of filming, because the individual is not choosing when the camera records---it is always recording, the self is removed from the notion of “truth.” Here, technology serves as a replacement for human memory, or human perceptual experience, and in doing so, is supposed to reveal an objective truth about the subject that they may not be able to determine for themselves. In *The Truman Show*, Truman is unaware that his life is being recorded and broadcast to the public; therefore, he is not acting or presenting a version of himself, this recording reveals his true self. Similarly, in *Ex Machina*, Ava is continuously observed by surveillance cameras in the compound, which are viewed by Nathan, but also available to Caleb. Again, the idea is that Caleb’s ability to observe surveil Ava without her knowledge of the recording could reveal a truth about her that she may not present when she is aware of being tested. *The Entire History of You* works slightly differently in that the individuals are aware of the constant recording done by their “grain” device, and these recordings will always be from the perspective of their own eyes. Surveillance is two-fold in this reality. First, an individual is constantly recording her or his own actions. Although they do have the ability to delete recordings later, the grain will always be recording the present moment. Second, people are surveilling each other simply through interacting with each other. Every interaction is recorded in two ways: your version and the other person’s perspective. Therefore, the “truth” of an interaction can be verified by the recordings of each person. The grain is replacing a person’s memory, because memory is reconstructive, and according to the research quoted in the reality,

“half of organic memories are junk--false memories.” It suggests that one’s knowledge of oneself could be false, and only the truth of film can help one determine their true self. Again, in terms of self definition, the control is taken from the individual despite their knowledge of the grain’s recordings, because self evaluation will always be mediated by the “objective” truth portrayed on the grain. In fact, in *The Entire History of You*, re-dos (where one re-watches their own interactions through the objective lense of their grain) are a normal part of social interaction. They serve as proof of certain experiences, and can even reveal parts of one’s actions that are lost to our memory, for example when someone experiences a “blackout” from consuming too much alcohol.

Despite the realities in these films championing the objectivity in recording “truth,” the films themselves self-reflexively demonstrate the possibility for artifice and manipulation. The simplest form of artifice is through knowledge of the recording process. Although Caleb is under the impression that Ava is unaware of the surveillance cameras, it is revealed that, not only did she know about them, but also that both she and Nathan acted for the cameras in ways to manipulate Caleb’s perceptions. For example, Nathan comes into Ava’s room, talks to her, and tears up her drawing. This is first shown only through the lense of the surveillance camera and leads both the viewer, and Caleb, to view Ava as a humanized victim. Later, Nathan shows the footage again with sound and from a different angle, which shows that their interaction was only a spectacle to manipulate Caleb’s emotions. This self-reflexively critiques *Ex Machina*’s portrayal of its characters and the near future, as it reminds the viewer that its reality is created by the camera, instead of recording an objective truth. Ava is simply a human actress portraying a robot, and the reality presented as if it were the present is simply a creation of the filmmakers.

Similarly, *The Truman Show* is based entirely upon the audience's knowledge of the artificiality of Truman's world. As the god-like producer of the show, Christof, directs the cameras, the actors, the musical score, and order of scenes. The viewer's attention is drawn to the production process of film, which while seemingly objective, is actually manipulated, and, in many ways, subjective. The entire premise of the movie is based upon a double-layered world, which reveals the process taken by all filmmakers to create the illusion of objective truth. Cutting between Truman's reality and the role of the production crew as they decide what to show in their show demonstrates the complicated nature of "film as truth." The cameras that observe Truman function as ordinary surveillance cameras; they are hidden from his view, and they are constantly recording. But it is the choice of which camera, which in juxtaposition with which shots, or which musical score that impacts the audience's interpretation of Truman's character. For example, in a scene where Truman looks at the sweater of his former lover, the film cuts to the audience who watches *The Truman Show* at a diner, and then, on their screens and in the film, a dissolve begins a flashback sequence of shots from when they first met. This scene reveals how the insertion of another sequence of recorded footage can impact the interpretation of Truman's experience by the audience. Both moments were recorded as "objective truth," but editing choices are key to shaping the perceptions of the audience. When Truman learns that his reality is constructed for a television show, he has to grapple with his self-definition; he must disentangle the artifice of the world with himself. Christof manipulated Truman to be afraid of water by having his father die in a shipwreck. His father, being part of the production of the show, pretended to die, but of course the "objective truth" recorded by the cameras, and Truman's own memory of the incident, was that his father drowned. Part of Truman's identity,

his fear of water, was created by the presence of a camera, and once this is revealed, Truman must call a part of his self identity into question. The line between self and performance on camera becomes further complicated as Truman attempts to escape the set of the show. Now, the way he acts in front of the objective camera is planned, and false, as he lies about his plans and acts erratically. The camera is no longer revealing his objective, true self, which suggests that it may never have had that ability in the first place. Through the artifice of recording his life, the film proposes that the presence of a camera may not assist in revealing the truth of a character, or that there is not one objectively true self.

The Entire History of You goes even further to demonstrate that an unedited, un-acted recording of someone or some event still might not be objective. In this reality, documentation on the grain takes the place of memory, as it should show the one, objective truth of a situation or a person's character. For example, airport security reviews an individual's grain footage from within a certain time-frame as proof that they are not bringing any harmful materials on a plane, and at a potential job interview, an individual may have to submit grain footage as a type of background check. These grain reviews are taken as fact, and determine important outcomes in the society, such as job qualifications and security measures. However, personally, the film suggests that individual usage and review of their, or other people's grains, is subjective and problematic. After his job interview, the main character re-plays the last five seconds of his interview tens of times, focusing on the multiple meanings of the employer's parting phrase. He constantly reinterprets the same, objective footage, and as the viewer also watches these re-does, it becomes unclear whether the interview went well at all. The repetition of the same footage confuses instead of providing clarity; the grain is evidence not of the truth but of an individual's

own subjective experience manipulating their perception of “objective events.” Later in the film, after an argument with his wife, he replays the moments over and over again, as a way of supplementing his anger and continuously reinterpreting her words to provide reasons to stay angry; again the footage itself doesn’t reveal anything about their relationship that isn’t moderated by his emotions. The ability to replay and enhance documented footage of his daily life causes him to become more paranoid, rather than sure of a person’s character. For example, he replays and zooms in on an interaction between his wife and another dinner party guest--taking an seemingly innocuous gesture, and suddenly believing that his wife is lying about her relationship with him--all because she laughs at this man’s joke and greets him when he enters a room. Additionally, because the grain feed is shareable, he tends to believe that all aspects of his wife’s grain, even footage of events before their marriage must be shared with him. Which poses the question of what parts of a person’s self are allowed to remain hidden. He then uses the information from years before their marriage, as evidence of her present character, and evidence that she must be cheating on him with another man from her past. By the end of the film, his suspicion is confirmed that at one point his wife and that man had slept together. But in the process of trying to obtain the grain footage to prove it, he ruins his marriage, and his wife leaves him. Revealing footage of his wife’s former relationship, a less mature self which she wanted to keep in the past, only served to cause more problems for their marriage. And, despite the “factual truth” revealed by the grain, the “truth” that he uncovers doesn’t seem worth the loss of his marriage, as at the end of the film, he cuts the grain out of his head. This suggests that perhaps that in terms of understanding ourselves and others, there are parts that are better left unknown.

The last form of media that informs our perception of the self is social media. Social media uses the “objective” form of photography and cinematography, but it allows the user to knowingly control their own self presentation. It builds upon the knowledge of artifice that has already been discussed in the aforementioned films about film--individuals can act for the camera, and they can choose what to show and what to delete--demonstrating that the self that the camera reveals is one that is purposely presented, and suggests that, despite the “objectif,” there may still be a self that is hidden from view. The films that focus on social media, *Black Mirror: Be Right Back* and *Black Mirror: Nosedive*, explore the differences between the online self and the “real self,” suggesting that there is an element of self-presentation inherent in all peoples’ selves, which is only exacerbated by new social media technology.

Social media by definition depends upon the interaction with other users, and so in the context of the self, their interactions tend to communicate a self that is favorable (DeAndrea, Walther). Users tend to mediate their self-presentation through their choices of images and status updates. This process is exaggerated through the projected future in *Nosedive*, through demonstrating both the performed and exhibited self (Hogan), and the film implicates the viewer in this culture of judgement of self presentation. In one of the opening scenes of the film, the camera placement places the viewer to evaluate the main character, Lacey. She practices different expressions in the mirror, but the viewer is placed on the other side of the mirror, so her face is framed on all four sides, and her personal rating, a 4.2, is also in the mirror, or on screen, simulating the perspective of social media. This moment seems to ask the viewer to make an evaluation of her expressions, and perhaps of her character, before ever seeing her interact with others. Furthermore, the use of point-of-view shots from Lacey’s perspective, which focus on

other characters by circling their face and displaying their rating, puts the viewer in that place of judgement again and again, as they must always place their evaluation in context of each discrete interaction and rating. However, these judgements are not of an individual's social media presentation, they are of their presentation in the "real world"--their performance. The film features a future where the lines are blurred between the selective presentation of the self through social media (exhibition) and their public self (performance). For example, at the coffee shop Lacey surveys the customers at the cafe, and the viewer, through a point of view shot, can see each person's rating as context for their performances. When she sits down, she curates the perfect photo of a half-eaten cookie and a latte, which she posts online as an exhibit of her morning. She doesn't eat the cookie or drink the latte though, these are only props in creating the ideal image of herself. This sequence demonstrates the complicated relationship between her performed self in the real world(e.g., Lacey at the coffee shop) and the exhibited self online,(e.g., the photo of Lacey's morning coffee). The self presented in both of these setting is an idealized, but not authentic self, because it is always being observed by an audience (Hogan). Since her ratings are dependent on both of these selves, both are highly-controlled and made to seem pleasant and favorable. Ratings are fully integrated into the everyday lives of the people in this film, as they determine not only social standing, but access to specific jobs, homes, and privileges; they almost serve as a form of social control, where the audience monitors an individual's self presentation, punishing those who are not acting in a way deemed socially ideal.

Not only is the public self constantly evaluated in *Nosedive*, but the film also reminds the viewer of the artifice that public self through both acting choices, and "backstage" scenes. Acting serves to remind the viewer of the strained and inauthentic nature of interpersonal interaction.

For example, when Lacey is in the elevator at work, she has a conversation with another woman who works in the building; while their words are nothing but upbeat and complimentary, the actresses in the scene hardly make eye contact with each other. Additionally, their smiles will slowly slip back to neutral expressions then bounce back to the pleasant facade when they resume conversation. Non-verbally, the exchange reads as awkward and forced, which reminds the viewer of the disconnect between their public selves and their hidden, authentic feelings. As the film progresses, and Lacey loses her high rating, the interpersonal interactions lose their tension and incongruency, which suggests that Lacey is no longer performing, but instead expressing her true thoughts and emotions.

Hogan describes 'Backstage' as the contradictory place "where we do much of the real work necessary to keep up appearances"(378). "Backstage scenes" are moments in the film where the individual's "behind-the-scenes" work to create her favorable performance is revealed. One example is when Lacey receives a video chat at home from a highly-rated, former friend. Lacey's home is the only location where she is not being observed by an audience, with the exception of curating exhibitions to put online, she doesn't need to worry about maintaining her public self. So, when she receives a video chat from a friend with a high rating, she scrambles to set up her performance--fixing her hair, wrapping a scarf around herself, and making sure the area looks neat---before taking the call. The quick change into her public self reveals the artifice of that self; she acts and looks different because she is aware of her audience. These scenes remind the viewer that the public self is purposefully created and therefore not an authentic representation of an individual, revealing the problematic nature of evaluating individuals based upon their public selves.

Similarly, the AI Ash in *Be Right Back* was based upon an exhibited and performed self through social media, since Ash was a heavy user. But not only did the AI not physically match all of Ash's body, aspects of his personality that were based on Ash's public self did not match those that his wife knew, presumably because his wife knew his true self. AI Ash often did not have enough data from social media to determine how to interact with Martha, which brought attention to the inconsistencies between Ash's public and true self. For example, online Ash posted mostly humorous statuses, so the AI was able to match that personality, but when it came to romantic interaction, or empathizing with his wife, the AI didn't have any knowledge of how to act to match the un-performed Ash. So while there was a likeness to the real Ash, Martha was never able to accept the AI as the Ash she knew.

At the end of the *Nosedive*, when Lacey is arrested, she has to take out the contact lenses that link up to her phone. These lenses were how the viewer, from Lacey's point of view, could see characters' social media images and ratings. When they are removed, Lacey notices specks of dust floating in the air that had always been filtered out by her lenses, because the lenses showed an idealized image of reality. Looking at the dust, Lacey begins to cry, because she is finally seeing reality as it exists, unmediated. Similarly, the viewer becomes aware that her or his point of view had always been modified by the media that Lacey used. By maintaining Lacey's perspective at the end, the film asks the viewer to consider an unmediated evaluation of individuals, and that perhaps those initial impressions and ratings, which were always mediated by the lenses, can't reveal all of the self. Finally, Lacey is closer to her authentic self because, without access to her social media, she is no longer attempting to perform or exhibit a different public self.

All of these films, *Never Let Me Go*, *Ex Machina*, *The Truman Show*, *Be Right Back*, *Nosedive*, and *The Entire History of You* use media to differentiate between types of selves. They suggest that a person presents different selves in different circumstances, and that the self can't be understood simply by through evaluation by the media. They continuously remind the viewer that parts of the self are created as a form of presentation, and therefore, observing the self is often not enough to fully understand it. Furthermore, these films recognize an increased tendency to mediate the self in the near future, and propose that the danger of mediating the self is that the self could become lost, as it does for many of these characters. Instead of depending on media technology to define oneself, these films suggest that media only complicates the process of self-definition, by blurring presentation with an authentic self. By focusing on an authentic, or true self, this group of films highlights the importance of individuals' personal journey to understand themselves in an increasingly complex media environment.

Conclusion

Recently, the projection of a future has shifted in science fiction film, as has been demonstrated by this group of films: *The Truman Show*, *Never Let Me Go*, *Black Mirror*, *Under the Skin*, *Her*, and *Ex Machina*. Instead of a future which is hundreds of years or galaxies away, these films show an unspecified near future which is strikingly similar to the viewer's present. The setting of a near future is revealed visually; exposition is done through juxtaposition of elements of the mise-en-scene, rather than overt narration, and more typical narration techniques are used either to blur the past, present, and future, or to focus only on the personal history of the characters. By setting these stories in the near future, and keeping them temporally vague, their messages are

more immediate to the viewer, since this reality looks like their own, and could possibly be happening now.

The subject of these films has shifted from the projection of a futuristic society, like those of past science fiction films, to stories about individuals attempting to navigate their own self definition. The technology or science that is characteristic of the future falls to the background, and instead it is the character itself that is questioned by the film. To build upon Sobchak's definition of science fiction, these films suggest that science or technology, while it is important in creating "problems of the future", it can also become secondary to the plot, and be less speculative and more situated in the present. The technology in these near future films is not placed in a societal context, but instead explored in relation to an individual's self definition. Furthermore, these films mark a trend in changing the subject of science fiction from speculative science, to a speculative self, as mediated by science or technology.

Some of these near future films investigate characters who are non-human, and pose questions about how humanity is complicated due to mediation of technology and other individuals. These films often present the body as the primary obstacle to understanding the self, as characters in the near future are somehow physically different from typical humans. But, these films assert that the body does not define humanity, and while it can complicate self definition, if the character can overcome their othered body and interact with others, they may be able to form interpersonal relationships which can lead to achievement of the emotional dimension of humanity. While the question of the self is presented as a question of humanity, the films are able to speak to the human viewer because they resolve their questions by asserting the power of interpersonal relationships in overcoming otherness, loneliness, and isolation.

The second way that these films navigate the self is through investigating the influence of media. Each of the mediums presented in the films, drawing/painting, photography/film, and social media champion the notion that a true self can be revealed through mediation. Yet, as the characters in these films attempt to use their media to define themselves, they either are unable to use their media effectively, or they seem to lose themselves in the mediation. For traditional art forms, such as drawing and painting, lack of artistic ability challenges the perception that art can reveal an individual's true self. The characters who attempt to define themselves through traditional art, whether they are talented or not, eventually abandon it as a self-definition method by the end of their films. Photography's objectivity provides an opportunity to observe an individual in order to evaluate their true self. However, this is also presented as problematic because individuals can perform for the camera, and evaluating footage remains a subjective process. Lastly, social media takes performance to the extreme, as individuals who define themselves using social media focus on the presentation of a likeable self. As they become increasingly mediated, the characters in social media films are unable to differentiate between their performance and their reality. These films suggest that emphasis on performing the self can cause an individual to lose their own uniqueness or identity.

Understanding the self is a complex notion which is not exclusive to futuristic settings, which is why it is important that these films blur the line between the viewer's present and the future. These films place navigation of the self, in its various dimensions, at the forefront, and let technology and science take the backseat. In doing so, they capture a picture of the present which is increasingly mediated and othering, and stress the importance of individuals holding onto, or rediscovering their own true selves. These films, as they situate themselves in the "near future",

are a distinct change in a the perception of the our future. They suggest that “the future” which science fiction films are forever attempting to understand, is already here; now the viewer of these films must reconcile their own present, and the implications of their selves within it.

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